

US005572421A

United States Patent [19]

Altman et al.

[11] Patent Number:

5,572,421

[45] **Date of Patent:**

Nov. 5, 1996

[54] PORTABLE MEDICAL QUESTIONNAIRE PRESENTATION DEVICE

[76] Inventors: Louis Altman; David Summerell, both of 5622 S. Woodlawn, Chicago, Ill. 60637; William E. Turcotte, II, 1234

Edmer St., Oak Park, Ill. 60302

[21] Appl. No.: 253,201

[22] Filed: Jun. 2, 1994

Related U.S. Application Data

[63] Continuation of Ser. No. 711,616, Jun. 6, 1991, abandoned, which is a continuation-in-part of Ser. No. 130,934, Dec. 9, 1987, Pat. No. 5,025,374.

[51]	Int. Cl. ⁶	G06F 159/00
[58]	Field of Search	

[56] References Cited

U.S. PATENT DOCUMENTS

3,934,226 4,130,881 4,365,315 4,545,023	1/1976 12/1978 12/1982 10/1985	Worthington 364/413.01 Stone 364/413.01 Haessler et al. 364/413.01 Jamnik 364/419 Mizzi 364/709
		Izumi et al

OTHER PUBLICATIONS

"Medical Progress, Decision Analysis", The New England Jnl of Med. Jan. 29, 1987, Stephen G. Pauker et al.

"Graphical Access To Medical Expert Systems: II: Design Interface For Physicians", C. D. Lane, Methods of Inf. In Med.: 25:143–150, 1986.

"A Decision-Driven System To Collect Patient History", Computers And Biomedical Research, 20 193–207(1987). "Oncocin: An Expert System For Oncology Protocol Management", Edward H. Shortliffepro: of 7th Int. Jnl Conf. on A. I., Vancouver BC Aug./1981.

A. W. Grogono, "Index For Measuring Health", The Lancet, Nov. 6, 1971 pp. 1024–1026.

"Sickness Impact Profile", John Hopkins University 1977, 21 pages.

Primary Examiner—Robert A. Weinhardt Attorney, Agent, or Firm—Laff, Whitesel, Conte & Saret, Ltd.

[57] ABSTRACT

A hand-held, battery-powered medical questionnaire presentation device is provided for use by a patient. The device has means for displaying questions to the patient, a limited number of keys by which the patient can enter answers, and a memory device for storing the patient's answers. The device is controlled by a pre-programmed microcomputer which stores in a memory the text of user instructions. medical or health-related questions, and words to be used in printed reports. The microcomputer is programmed to tally the patient's answers and, on the basis of that information and objective data supplied by a medical staffer, to present an evaluation of aspects of the patient's medical condition or health status. The evaluation may consist of recommendations for tests, an analysis of the patient's general medical condition, an analysis of the patient's surgical risk, an analysis of the patient's functional health status, recommendations for counseling the patient, recommendations for health-related lifestyle improvements, or any other conclusions which may be inferred from the patient's responses. The questions and the answer-evaluation software are stored in a readily removable and replaceable integrated circuit module. A variety of specialized questionnaires targeting particular health risks and medical conditions may be provided on interchangeable modules.

8 Claims, 27 Drawing Sheets

Microfiche Appendix Included (3 Microfiche, 256 Pages)

SYSTEM / SYMPTOM ARRAY

395/401, 924

